1. For the given quadrant, determine if the coordinates are positive or negative.
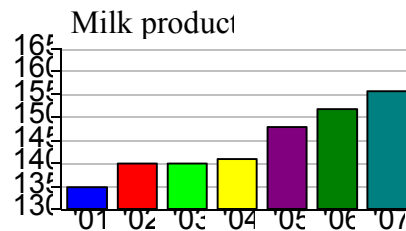
In quadrant I, are the x-coordinates positive or negative?

○   Negative

○   Positive

In quadrant I, are the y-coordinates positive or negative?

○   Positive

○   Negative

2. The bar graph shows a country's total milk production in billions of pounds for the years 2001 through 2007. Estimate the country's milk production in 2001 and 2007.

Milk product

Milk production in 2001 was about ☐ billion pounds. (Type a whole number.)

Milk production in 2007 was about ☐ billion pounds. (Type a whole number.)

3. Give the ordered pair for the point labeled E in the figure. Tell the quadrant in which the point is located.

The ordered pair for the point labeled E is ☐. (Type an ordered pair.)

Choose the quadrant in which E is located.

○ A. Quadrant III

○ B. Quadrant II

○ C. Quadrant I

○ D. Quadrant IV

○ E. no quadrant
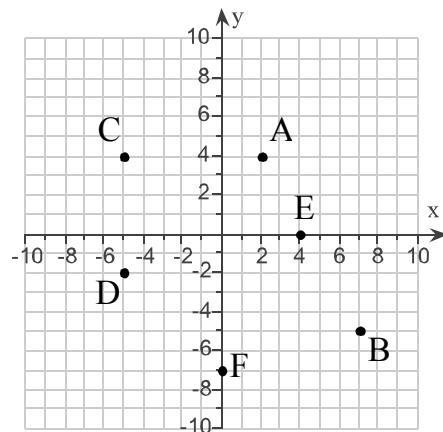
4. Fill in the blank with the correct response.

   The ordered pair (__, -9) is a solution of the equation $x = 8$.

   The ordered pair ($\boxed{}$, -9) is a solution of the equation $x = 8$.

5. Determine whether $(3, -4)$ is a solution of $4x - 5y = -7$.

   Is $(3, -4)$ a solution to the equation?

   ○ Yes

   ○ No

6. Determine whether $(12, -4)$ is a solution of $y = -\dfrac{2}{3}x$.

   Is $(12, -4)$ a solution of the equation?

   ○ Yes

   ○ No

7. Complete the ordered pair for the equation $y = -3x + 2$.

   (__, 17)

   Complete the ordered pair.

   $\left(\boxed{}, 17\right)$
   (Type an integer or a simplified fraction.)

8. Use the equation below and the indicated value to find an ordered pair that is a solution.

   $y = 4x - 2$ Let $x = 3$.

   The ordered pair is $(3, \boxed{})$.
   (Simplify your answer. Type an integer or a fraction.)

9. Complete the ordered pair for the equation $y = 2x + 5$.

   (, -5)

   Complete the ordered pair.

   $\left(\boxed{}, -5\right)$

10. Complete the ordered pair below for the equation $y = -10x + 1$.

$(0, \underline{\hspace{1em}})$

Complete the ordered pair.

$\left(0, \boxed{}\right)$
(Type an integer or a simplified fraction.)

11. Complete the ordered pair for the equation $y = -3x + 2$.

$(\underline{\hspace{1em}}, 17)$

Complete the ordered pair.

$\left(\boxed{}, 17\right)$
(Type an integer or a simplified fraction.)

12. Complete the table of values. Write the result as ordered pairs.

$y + 3 = 0$

x	y
4	
2	
0	

Complete the table.

x	y		Ordered Pairs
4	$\boxed{}$	$\rightarrow$	$\boxed{}$
2	$\boxed{}$	$\rightarrow$	$\boxed{}$
0	$\boxed{}$	$\rightarrow$	$\boxed{}$

13. Complete the table of values and then plot the ordered pairs.

$$5x - 4y = 20$$

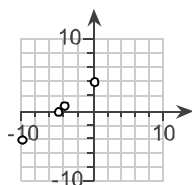| x	y
0	
	0
−4	
	−4

x	y
0	☐
☐	0
−4	☐
☐	−4

(Simplify your answers.)

Choose the correct graph of the ordered pairs.

○A.

○B.
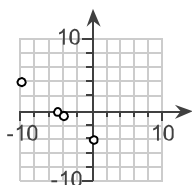
○C.
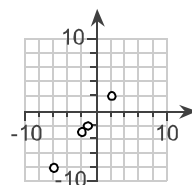
○D.
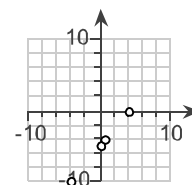
14. Complete the ordered pair table for the equation $y + 6 = 0$.

x	y
0	☐

(Simplify your answer. Type an integer or a fraction.)

Plot the ordered pair.

x	y
0	− 6
1	☐

(Simplify your answer. Type an integer or a fraction.)

Plot the ordered pair.

x	y
0	− 6
1	− 6
− 7	☐

(Simplify your answer. Type an integer or a fraction.)

Plot the ordered pair.
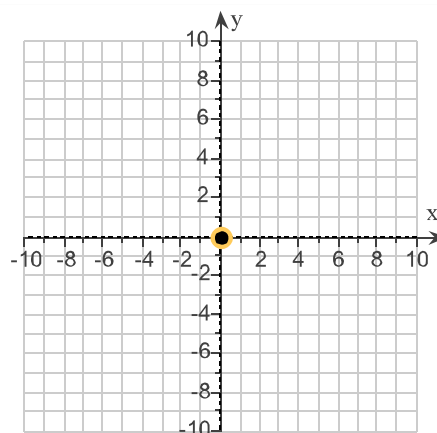
15. Complete the table of values for the equation $2x + 3y = 6$.

x	y
0	☐
☐	0
6	☐

(Simplify your answers. Type an integer or a fraction.)

16. Complete the given ordered pairs for the equation x = 6.

x	y
	4
	1
	− 4

x	y
☐	4
☐	1
☐	− 4

(Simplify your answers. Type an integer or a fraction.)

17. Complete the given ordered pairs for the equation y = 8.

x	y
2	
1	
− 3	

x	y
2	☐
1	☐
− 3	☐

(Simplify your answers. Type an integer or a fraction.)

18.　　　　Complete the table of values. Write the result as ordered pairs.

$y + 5 = 0$

x	y
4	
2	
0	

Complete the table.

x	y		Ordered Pairs
4	☐	→	☐
2	☐	→	☐
0	☐	→	☐

19. Complete the ordered pair table for the equation $y + 4 = 0$.

x	y
0	☐

(Simplify your answer. Type an integer or a fraction.)

Plot the ordered pair.

x	y
0	-4
3	☐

(Simplify your answer. Type an integer or a fraction.)

Plot the ordered pair.

x	y
0	-4
3	-4
-9	☐

(Simplify your answer. Type an integer or a fraction.)
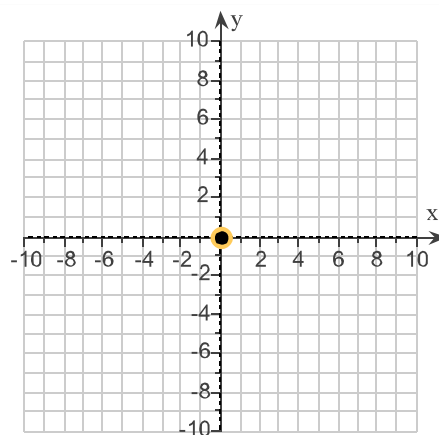
Plot the ordered pair.

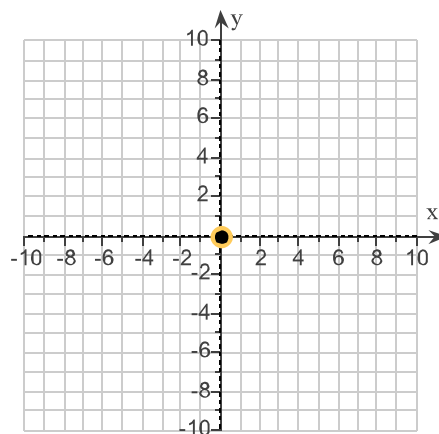20. Plot the point $\left(\dfrac{3}{5}, -2\right)$ on the rectangular coordinate system provided.

Plot the point $\left(\dfrac{3}{5}, -2\right)$ on the graph to the right.
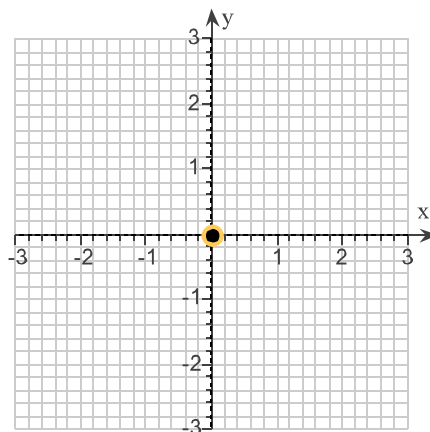
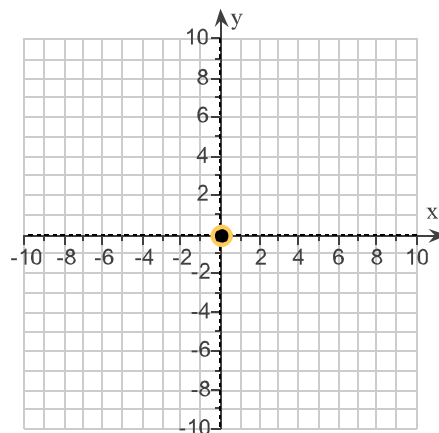21. Plot the following point in a rectangular coordinate system.

(4,0)
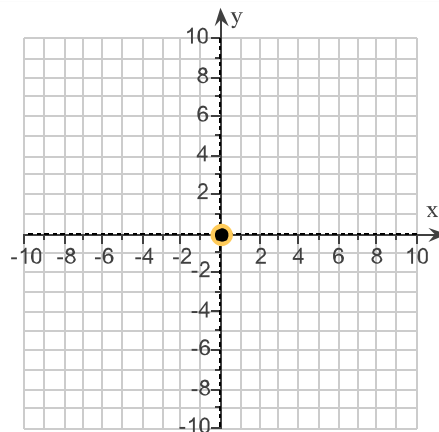
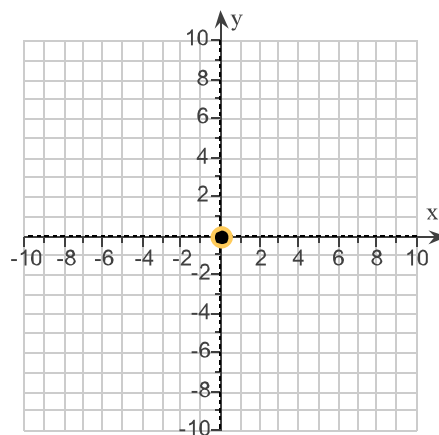22. Plot $(-5,5)$ on the coordinate axes.

Plot $(-5,5)$.

23.   Plot $(0, -6)$ on the coordinate axes.

Use the graph on the right to plot the point $(0, -6)$.

24.   Plot the following point in a rectangular coordinate system.

$(1,0)$

25.   The table shows the rate (in percent) at which a food kitchen increased the number of meals it served in comparison to the previous year.

Year	Rate (%)
1999	15
2000	16
2001	9
2002	14

Write the data from the table as ordered pairs (x,y), where x represents the year and y represents rate of increase.

☐

(Simplify your answers. Type an ordered pair. Use commas to separate answers.)

26. An insurance company has assigned a risk factor to its drivers based on age. The risk factor is represented by the following equation, where x represents age and y is the risk factor.

$y = -0.60x + 115$

a) Complete the table of values.
b) Write the data from the table as ordered pairs.
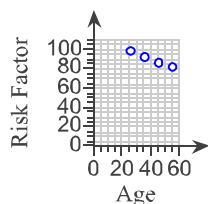c) Make a scatter diagram of the data.

Age (x)	Risk Factor (y)
25	
35	
45	
55	

a)

Age(x)	Risk Factor(y)
25	☐
35	☐
45	☐
55	☐

b) Write the data from the table as ordered pairs.

☐

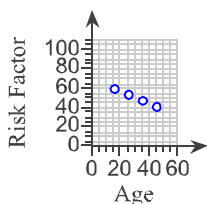(Use a comma to separate answers as needed.)
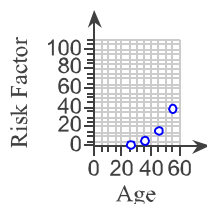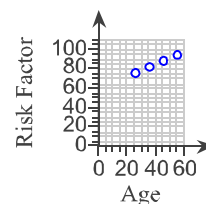
c) Choose the correct scatter diagram.

A.   B.   C.   D.

27. Suppose that it costs $20 to place a classified advertisement in the newspaper, plus $4 for each line. Then the cost to place an ad x lines long is given by y dollars, where $y = 4x + 20$.

Express as an ordered pair the fact that a 3 line ad costs $32.

☐

(Simplify your answer. Type an ordered pair. Type an integer or a fraction.)

Express as an ordered pair the fact that an ad costing $84 is 16 lines long.

☐

(Simplify your answer. Type an ordered pair. Type an integer or a fraction.)

28. An insurance company has assigned a risk factor to its drivers based on age. The risk factor is represented by the following equation, where x represents age and y is the risk factor.

$y = -0.50x + 117$

a) Complete the table of values.
b) Write the data from the table as ordered pairs.
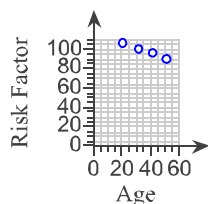c) Make a scatter diagram of the data.

Age (x)	Risk Factor (y)
20	
30	
40	
50	

a)

Age(x)	Risk Factor(y)
20	☐
30	☐
40	☐
50	☐

b) Write the data from the table as ordered pairs.

☐

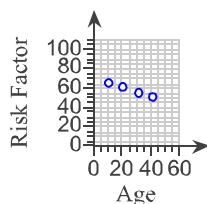(Use a comma to separate answers as needed.)
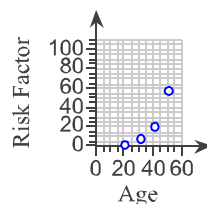
c) Choose the correct scatter diagram.

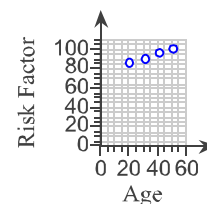○A.   ○B.   ○C.   ○D.

29. The maximum benefit for the heart from exercising occurs if the heart rate is in the target heart rate zone. The lower limit of this target zone can be approximated by the linear equation $y = -0.65x + 142$, and the upper limit of the target heart rate zone can be approximated by the linear equation $y = -0.85x + 183$, where x represents age and y represents heartbeats per minute. What is the target heart rate zone for age 20? Age 40?

The target heart rate zone for age 20 is between ☐ and ☐ beats per minute.
(Type integers or decimals.)

The target heart rate zone for age 40 is between ☐ and ☐ beats per minute.
(Type integers or decimals.)

30. Graph the linear equation.

$$y = x - 9$$

Use the graphing tool to graph the equation.

Click to enlarge graph

31. Find the intercepts and then use them to graph the equation.

$$2x - 6 = y$$

Use the graphing tool to graph the line. Use the intercepts when drawing the line. If only one intercept exists, use it and another point to draw the line.

Click to enlarge graph

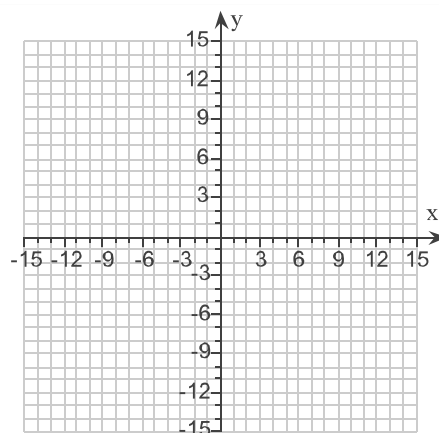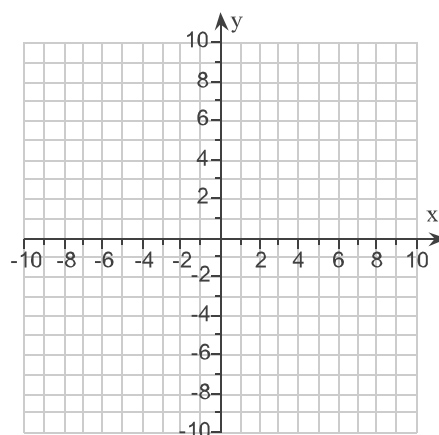**Student:** _____
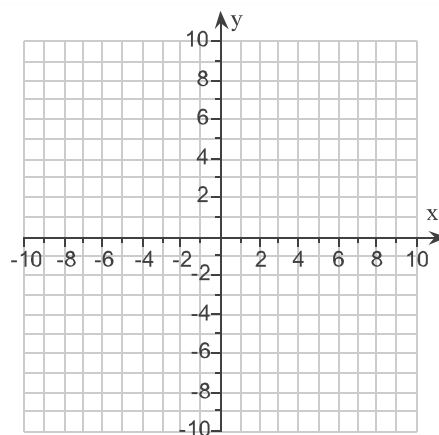**Date:** _____
Time: _____

Instructor: Nader Green
Course: Algebra Spring 2016 (Mon-Wed)
Book: Lial: Introductory Algebra, 10e

Assignment: Ch4. Graphs of Linear Equations

32. Graph.

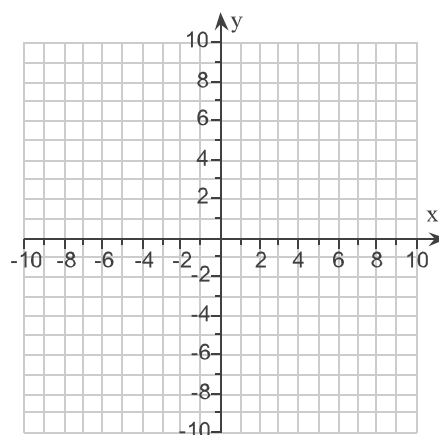$$5x + 2y = -10$$

Use the graphing tool on the right to graph the equation.

Click to enlarge graph

33. Find the graph of the equation by plotting points.

$$y = -3x$$

Use the graphing tool on the right to graph the line.

Click to enlarge graph

34. Match the information about each graph with the correct linear equation.

Information	Linear Equations
(a) The graph of the equation has y-intercept $(0, -9)$.	A. $y = 4x$
(b) The graph of the equation has $(0, 0)$ as x-intercept and y-intercept.	B. $4x + y = -9$
(c) The graph of the equation does not have an x-intercept.	C. $x - 9 = 0$
(d) The graph of the equation has x-intercept $(9,0)$.	D. $y = 3$

(a) The graph of equation
```
B
A
D
C
```
has y-intercept $(0, -9)$.

(b) The graph of equation
```
B
A
D
C
```
has $(0,0)$ as x-intercept and y-intercept.

(c) The graph of equation
```
B
A
D
C
```
does not have an x-intercept.

(d) The graph of equation
```
B
A
D
C
```
has x-intercept $(9,0)$.

35. Graph the equation by plotting points.

$$y = \frac{1}{2}x - 3$$

Complete the ordered pairs.

$(2, \boxed{}), (0, \boxed{})$

Use the graphing tool on the right to graph the line.

Click to enlarge graph
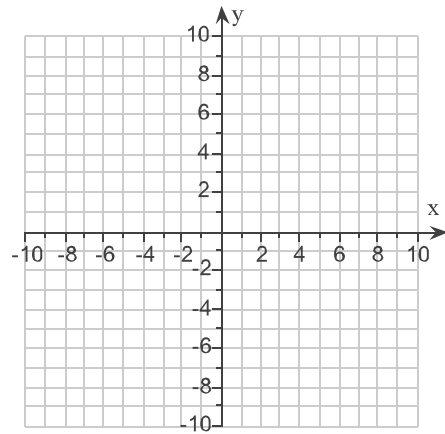
36.   Find the intercepts for the graph of the equation.

$x - y = -17$

To find the y-intercept, let $x =$
$\begin{array}{c} 0 \\ 1 \\ 2 \\ 3 \\ 4 \\ -17 \end{array}$.

Substitute $x = 0$ in the equation.

$x - y = -17$
$\boxed{} - y = -17$

Solve for y.

$0 - y = -17$
$y = \boxed{}$

The y-intercept is $\boxed{}$. (Type an ordered pair.)

To find the x-intercept, let $y =$
$\begin{array}{c} 0 \\ 1 \\ 2 \\ 3 \\ 4 \\ -17 \end{array}$.

Substitute $y = 0$ in the equation.

$x - y = -17$
$x - \left(\boxed{} \right) = -17$

36.
(cont.)

Subtract.

$$x - 0 = -17$$

$$x = \boxed{}$$

The x-intercept is $\boxed{}$. (Type an ordered pair.)

37.

Describe what the graph of the linear equation will look like on the coordinate plane. (Hint: Rewrite the equation if necessary so that it is in a more recognizable form.)

$$5x = y - 15$$

Chose the correct answer below.

○A. The graph is a line with x-intercept $(3,0)$ and y-intercept $(0,15)$.

○B. The graph is a vertical line with x-intercept $(3,0)$.

○C. The graph is a vertical line with x-intercept $(-3,0)$.

○D. The graph is a line with x-intercept $(-3,0)$ and y-intercept $(0,15)$.

○E. The graph is a horizontal line with y-intercept $(0,3)$.

○F. The graph is a horizontal line with y-intercept $(0,15)$.

○G. The graph passes through the origin $(0,0)$. It also passes through the points $(-3,0)$ and $(0,15)$.

○H. The graph passes through the origin $(0,0)$. It also passes through the points $(3,0)$ and $(0,15)$.

38.   Describe what the graph of the linear equation will look like on the coordinate plane. (Hint: Rewrite the equation if necessary so that it is in a more recognizable form.)

$$5y = -10$$

Choose the correct answer below.

○A. The graph is a vertical line with x-intercept $(2,0)$.

○B. The graph is a horizontal line with y-intercept $(0, -2)$.

○C. The graph passes through the origin $(0,0)$. It also passes through the points $(-2,0)$ and $(0,10)$.

○D. The graph is a line with x-intercept $(5,0)$ and y-intercept $(0,10)$.

○E. The graph is a vertical line with x-intercept $(5,0)$.

○F. The graph passes through the origin $(0,0)$. It also passes through the points $(2,0)$ and $(0,10)$.

○G. The graph is a horizontal line with y-intercept $(0,2)$.

○H. The graph is a line with x-intercept $(2,0)$ and y-intercept $(0,10)$.

39.   Match the information about each graph with the correct linear equation.

Information	Linear Equations
(a) The graph of the equation has y-intercept $(0, -7)$.	A. $9x + y = -7$
(b) The graph of the equation has $(0, 0)$ as x-intercept and y-intercept.	B. $y = 6$
(c) The graph of the equation does not have an x-intercept.	C. $x - 7 = 0$
(d) The graph of the equation has x-intercept $(7,0)$.	D. $y = 5x$

(a) The graph of equation $\boxed{\begin{matrix} A \\ D \\ B \\ C \end{matrix}}$ has y-intercept $(0, -7)$.

(b) The graph of equation $\boxed{\begin{matrix} A \\ D \\ B \\ C \end{matrix}}$ has $(0,0)$ as x-intercept and y-intercept.

(c) The graph of equation $\boxed{\begin{matrix} A \\ D \\ B \\ C \end{matrix}}$ does not have an x-intercept.

(d) The graph of equation $\boxed{\begin{matrix} A \\ D \\ B \\ C \end{matrix}}$ has x-intercept $(7,0)$.

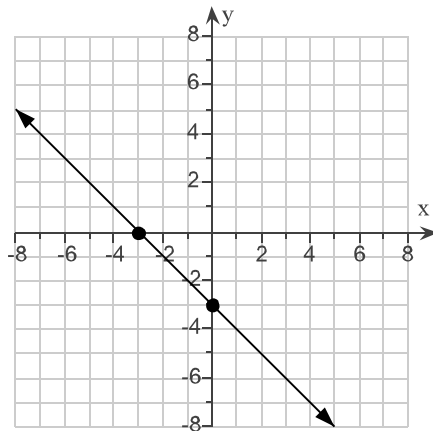40.   Find the intercepts of the following graph.

The x-intercept is ☐ .
(Type an ordered pair, using integers or decimals.)

The y-intercept is ☐ .
(Type an ordered pair, using integers or decimals.)

41.   Find the intercepts of the following graph.

The x-intercept is ☐ .
(Type an ordered pair, using integers or decimals.)

The y-intercept is ☐ .
(Type an ordered pair, using integers or decimals.)

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42. Graph the equation by plotting points.

$y + x = -2$

Complete the ordered pairs.

$(0, \boxed{}), (-2, \boxed{})$

Use the graphing tool to graph the equation.

Click to enlarge graph
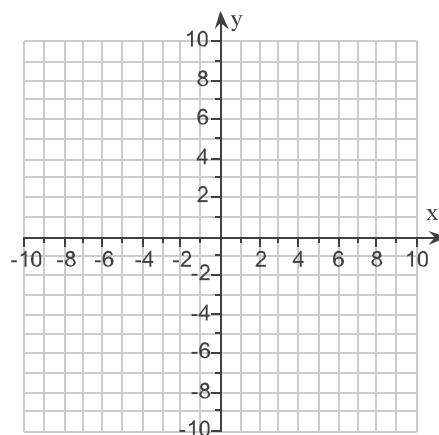
43. Graph the equation by plotting points.

$y = \dfrac{1}{5}x - 6$

Complete the ordered pairs.

$(5, \boxed{}), (0, \boxed{})$

Use the graphing tool on the right to graph the line.
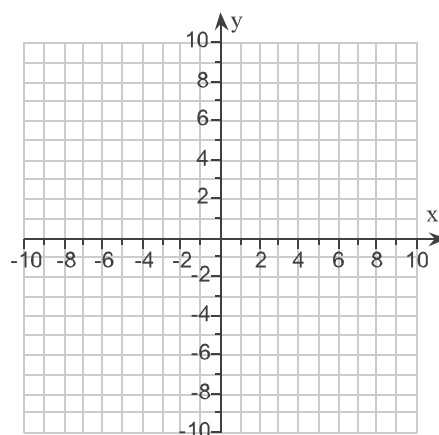
Click to enlarge graph

Student: _____
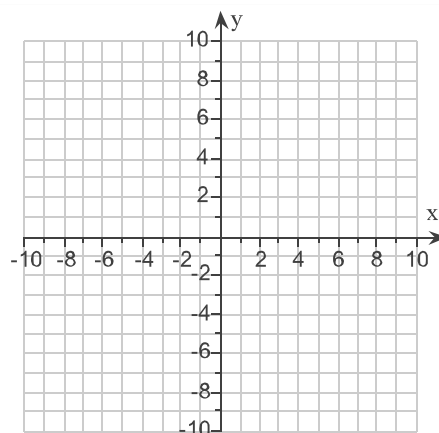**Date:** _____
Time: _____

Instructor: Nader Green
Course: Algebra Spring 2016
(Mon-Wed)
Book: Lial: Introductory Algebra, 10e

Assignment: Ch4. Graphs of Linear Equations

44.   Graph by plotting points.

$2x = -y + 4$

Complete the ordered pairs.

$(-2, \boxed{}), (1, \boxed{})$

Use the graphing tool on the right to graph the line.

Click to enlarge graph

45.   Find the x- and y- intercepts.

$x - y = 6$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

○ A. The x-intercept is $\boxed{}$. (Simplify your answer. Type an ordered pair.)

○ B. There is no x-intercept.

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

○ A. The y-intercept is $\boxed{}$. (Simplify your answer. Type an ordered pair.)

○ B. There is no y-intercept.

46.   Find the intercepts for the graph of the equation.

$$x - y = 19$$

To find the y-intercept, let x = $\boxed{\begin{array}{c} 0 \\ 1 \\ 2 \\ 3 \\ 4 \\ 19 \end{array}}$.

Substitute x = 0 in the equation.

$$x - y = 19$$
$$\boxed{} - y = 19$$

Solve for y.

$$0 - y = 19$$
$$y = \boxed{}$$

The y-intercept is $\boxed{}$. (Type an ordered pair.)

To find the x-intercept, let y = $\boxed{\begin{array}{c} 0 \\ 1 \\ 2 \\ 3 \\ 4 \\ 19 \end{array}}$.

Substitute y = 0 in the equation.

$$x - y = 19$$
$$x - \left(\boxed{} \right) = 19$$

46.

(cont.)

Subtract.

$$x - 0 = 19$$

$$x = \boxed{}$$

The x-intercept is $\boxed{}$. (Type an ordered pair.)

---

47. Find the intercepts for the graph of the equation given.

$$7x - 6y = 42$$

The x-intercept is $\boxed{}$.
(Simplify your answer. Type an ordered pair.)

The y-intercept is $\boxed{}$.
(Simplify your answer. Type an ordered pair.)

---

48. Find the intercepts for the graph of the equation given.

$$x + 5y = 0$$

The x-intercept is $\boxed{}$.
(Simplify your answer. Type an ordered pair.)

The y-intercept is $\boxed{}$.
(Simplify your answer. Type an ordered pair.)

---

49. Describe what the graph of the linear equation will look like on the coordinate plane. (Hint: Rewrite the equation if necessary so that it is in a more recognizable form.)

$$2y = -10$$

Choose the correct answer below.

○A. The graph is a line with x-intercept $(5,0)$ and y-intercept $(0,10)$.

○B. The graph passes through the origin $(0,0)$. It also passes through the points $(5,0)$ and $(0,10)$.

○C. The graph is a horizontal line with y-intercept $(0,5)$.

○D. The graph passes through the origin $(0,0)$. It also passes through the points $(-5,0)$ and $(0,10)$.

○E. The graph is a horizontal line with y-intercept $(0,-5)$.

○F. The graph is a line with x-intercept $(2,0)$ and y-intercept $(0,10)$.

○G. The graph is a vertical line with x-intercept $(5,0)$.

○H. The graph is a vertical line with x-intercept $(2,0)$.

50. Graph the linear equation using intercepts.

$y + 4x = 0$

Use the graphing tool to graph the line. Use the intercepts when drawing the line. If only one intercept exists, use it and another point to draw the line.

Click to enlarge graph

51. Graph the equation by plotting points.

$x = 6$

Use the graphing tool on the right to graph the line.
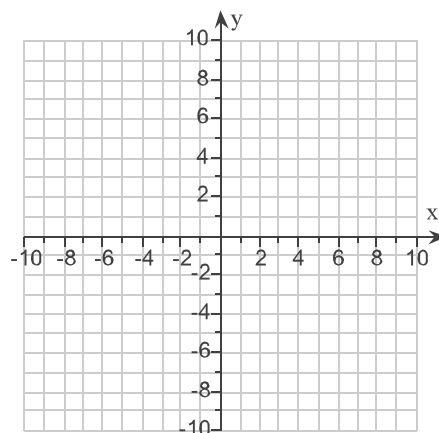
Click to enlarge graph

52.

Graph the equation by plotting points.

$y + 4 = 0$

Use the graphing tool on the right to graph the line.

Click to enlarge graph
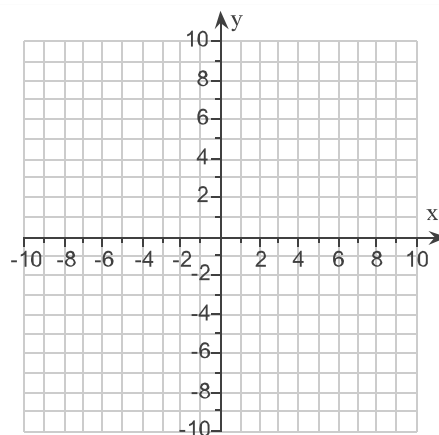
53.

Graph the equation.

$-4y = 20$

Use the graphing tool to graph the equation.
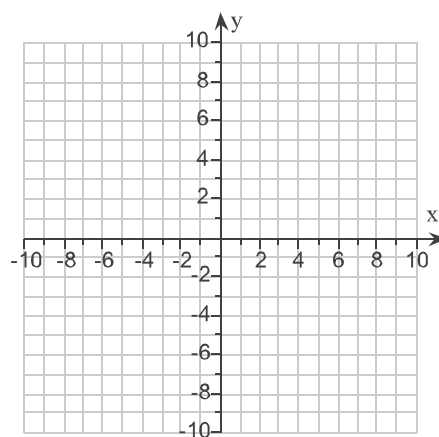
Click to enlarge graph

54.   Match the equation with its graph.

$x = -4$

Choose the correct graph below.

A.
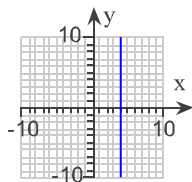
B.
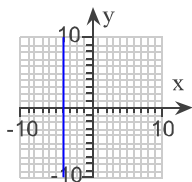
C.
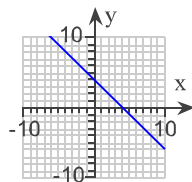
D.
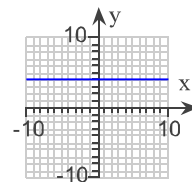
55.

A delivery company's charge for an overnight package weighing in excess of one pound is given by the formula $c = 2.79w + 15.19$, where w is the weight of package in pounds. Find the following.

A 7-pound package costs $ ☐ to send overnight.
(Round to the nearest cent.)

A 13-pound package costs $ ☐ to send overnight.
(Round to the nearest cent.)

A 14-pound package costs $ ☐ to send overnight.
(Round to the nearest cent.)

The figure, shown to the right, is the graph of the formula for the company's charge, with w on the horizontal axis, in pounds, and c on the vertical axis in dollars.

Choose the approximate cost of sending a $14\frac{1}{2}$-pound package overnight.

○A. $42   ○B. $73   ○C. $56

A package that costs $193.16 to mail weighs about ☐ pounds.
(Round to the nearest pound.)
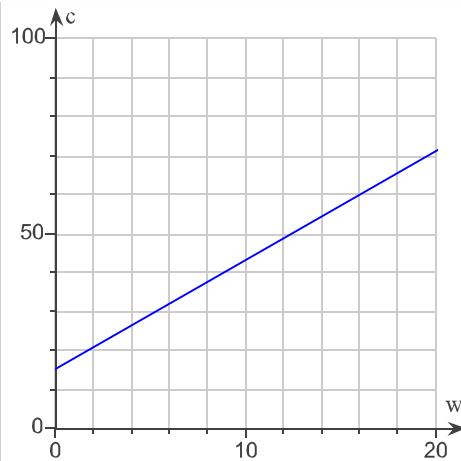
56.   Find the slope, if it exists, of the line containing the pair of points.

$(4,0)$ and $(0,-5)$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

   ○ A.   The slope m = $\boxed{}$. (Simplify your answer. Type an integer or a fraction.)

   ○ B.   The slope is undefined.

57.   Find the slope, if it exists, of the line containing the pair of points $(6,8)$ and $(-10,8)$.

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

   ○ A.   The slope of the line is $\boxed{}$. (Type an integer or a simplified fraction.)

   ○ B.   The slope is undefined.

58. Look at the graph at the right, and answer the questions given below. Complete parts a through d below.

(a) Start at the point $(-3, -8)$ and count vertically up to the horizontal line that goes through the other plotted point. What is this vertical change? (Remember: "up" means positive, "down" means negative.)

vertical change = ☐
(Type an integer or a fraction.)

(b) From this new position, count horizontally to the other plotted point. What is this horizontal change? (Remember: "right" means positive, "left" means negative.)

horizontal change = ☐
(Type an integer or a fraction.)

(c) What is the quotient of the numbers found in parts (a) and (b)?

quotient = ☐
(Simplify your answer. Type an integer or a fraction.)

What is this number called?

○ A. change in y

○ B. change in x

○ C. slope of a line

○ D. x-intercept of the line

○ E. y-intercept of the line

(d) If it is needed to start at the point $(1,6)$ and end at the point $(-3, -8)$ would the answer to part (c) be the same? Explain. Select the correct choice below and, if
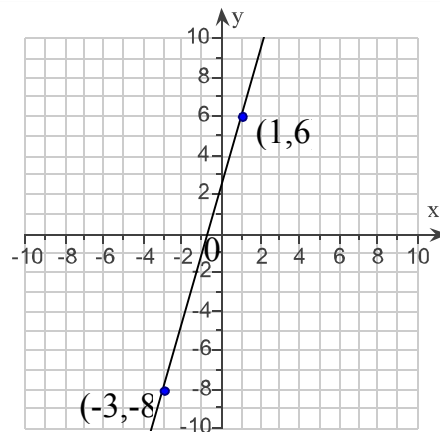
58.
(cont.)

necessary, fill in the answer box to complete your choice.

○ A. Yes, it doesn't matter which point it is started from. The slope would be expressed as the quotient of ▢ and ▢ , which simplifies to ▢ .

○ B. No, it does matter which point it is started from. The slope would be expressed as the quotient of ▢ and ▢ , which simplifies to ▢ .

59.

Find the slope of the line shown on the graph to the right.

Select the correct choice below and fill in any answer boxes within your choice.

○ A. The slope of the line is ▢ .
(Type an integer or a simplified fraction.)

○ B. The slope is undefined.

(3,3)
(−4,−3)
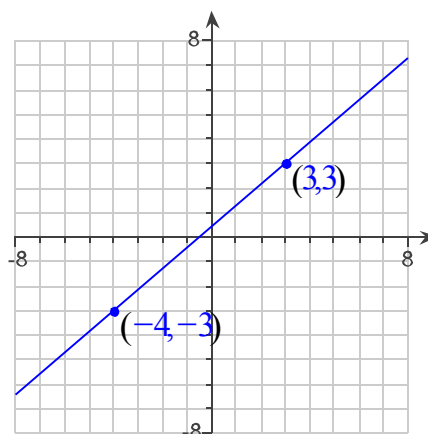
60.

Find the slope, if it exists, of the line containing the pair of points.

$(8,0)$ and $(0, -2)$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

○ A. The slope m = ▢ . (Simplify your answer. Type an integer or a fraction.)

○ B. The slope is undefined.

61.   Find the slope, if it exists, of the line containing the pair of points.

$(3,7)$ and $(6,-2)$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

○ A. The slope $m = $ ▢ . (Simplify your answer. Type an integer or a fraction.)

○ B. The slope is undefined.

62.   Find the slope, if it exists, of the line containing the pair of points $(3,-10)$ and $(-1,-10)$.

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

○ A. The slope of the line is ▢ . (Type an integer or a simplified fraction.)

○ B. The slope is undefined.

63.   Find the slope, if it exists, of the line containing the pair of points $(4,-5)$ and $(4,-6)$.

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

○ A. The slope is ▢ . (Simplify your answer. Type an integer or a fraction.)

○ B. The slope is undefined.

64.   Find the slope, if it exists, of the line containing the pair of points.

$(-17.1, 3.8)$ and $(-16.7, 2.1)$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

○ A. The slope is ▢ . (Simplify your answer.)

○ B. The slope is undefined.

65.

Find the slope of the line containing the following two points: $\left(\frac{1}{8}, -4\right)$ and $\left(-\frac{1}{4}, -\frac{1}{4}\right)$.

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

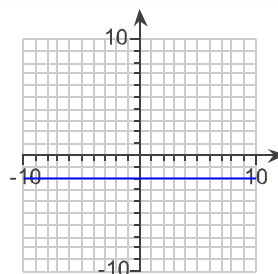○A. The slope is ▢. (Type an integer or a simplified fraction.)

○B. The slope is undefined.

66.

For the graph on the right, determine if the slope is positive, negative, or zero, and whether the y-value of the y-intercept is positive, negative, or zero.

The slope is

○A. zero.

○B. negative.

○C. positive.

The y-value of the y-intercept is

○A. negative.

○B. zero.

○C. positive.
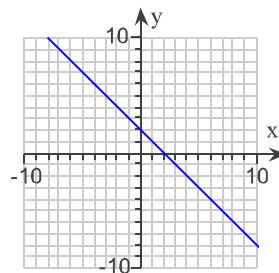
67. For the graph on the right, determine if the slope is positive, negative, or zero, and whether the y-value of the y-intercept is positive, negative, or zero.

The slope is

- ○ A. zero.

- ○ B. negative.

- ○ C. positive.

The y-value of the y-intercept is

- ○ A. zero.

- ○ B. negative.
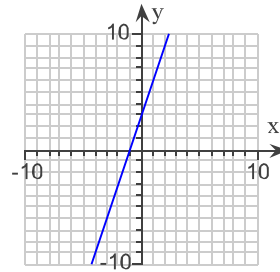
- ○ C. positive.

68. For the graph on the right, determine if the slope is positive, negative, or zero, and whether the y-value of the y-intercept is positive, negative, or zero.

The slope is

- ○ A. positive.

- ○ B. negative.

- ○ C. zero.

The y-value of the y-intercept is

- ○ A. positive.

- ○ B. zero.

- ○ C. negative.
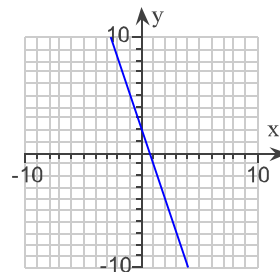
69. For the graph on the right, determine if the slope is positive, negative, or zero, and whether the $y-$value of the $y-$intercept is positive, negative, or zero.

The slope is

○ A. zero.

○ B. negative.

○ C. positive.

The $y-$value of the $y-$intercept is

○ A. zero.

○ B. negative.

○ C. positive.

70. Find the slope, if it exists.

$$y = -9x + 9$$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

○ A. $m = $ ▢ (Type an integer or a simplified fraction.)

○ B. The slope is undefined.

71. Find the slope, if it exists.

$$y = -4x + 8$$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

○ A. $m = $ ▢ (Type an integer or a simplified fraction.)

○ B. The slope is undefined.

72. Find the slope of the following line.

$5y = x + 10$

Select the correct choice below and fill in any answer boxes within your choice.

○A. The slope is ▢.
(Type an integer or a simplified fraction.)

○B. The slope is undefined.

---

73. Find the slope of the line.

$y = 3$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

○A. The slope is ▢. (Type an integer or a simplified fraction.)

○B. The slope is undefined.

---

74. Find the slope, if it exists.

$x = -3$

Select the correct choice below and fill in any answer boxes within your choice.

○A. The slope is ▢. (Type an integer or a simplified fraction.)

○B. The slope is undefined.

---

75. Find the slope of the following line.

$3x - y = 0$

Select the correct choice below and fill in any answer boxes within your choice.

○A. The slope is ▢.
(Type an integer or a simplified fraction.)

○B. The slope is undefined.

76. Give the slope of each line and then determine whether the two lines are parallel, perpendicular, or neither parallel nor perpendicular.

$$2x + 5y = 10$$
$$-15x + 6y = 0$$

The slope of the first line is ☐. (Type an integer or a simplified fraction.)

The slope of the second line is ☐. (Type an integer or a simplified fraction.)

Determine whether the two lines are parallel, perpendicular, or neither parallel nor perpendicular.

○A. The lines are parallel.

○B. The lines are neither parallel nor perpendicular.

○C. The lines are perpendicular.

77. The pitch of a roof is its slope. Find the pitch of the roof shown.
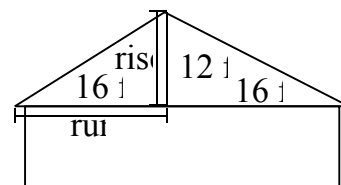
The pitch is ☐. (Type an integer or a simplified fraction.)

78. What is the slope of the given slide?
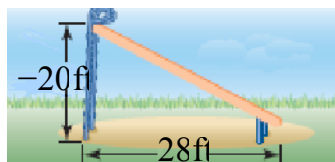
The slope of the slide is ☐.
(Type an integer or a simplified fraction.)

79. The pitch of a roof is its slope. Find the pitch of the roof shown.

rise 20 ft, 32 ft, 32 ft, run
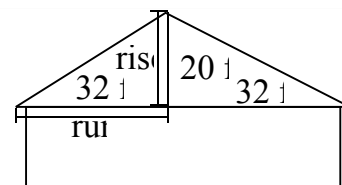
The pitch is ☐. (Type an integer or a simplified fraction.)

80. What is the slope of the given slide?

−9 ft ... 12 ft
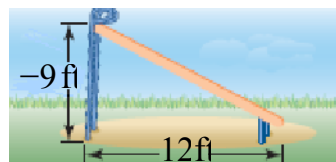
The slope of the slide is ☐.
(Type an integer or a simplified fraction.)

81. Find the slope and y-intercept of the graph of the equation.

$$y = \frac{8}{3}x - 2$$

Slope = ☐ (Enter a fully reduced fraction.)

The y-intercept is ☐.
(Simplify your answer. Type an ordered pair.)

82. Write the equation of the line with the following slope and y-intercept.

$$m = 7, \ (0, -3)$$

The equation of the line is ☐.
(Type your answer in slope-intercept form. Use integers or fractions for any numbers in the equation.)

83. Match each equation with the graph that would most closely resemble its graph.

(a) $y = x - 2$
(b) $y = -x + 2$
(c) $y = -x - 2$
(d) $y = x + 2$

The graph for (a) $y = x - 2$ is ☐.

The graph for (b) $y = -x + 2$ is ☐.
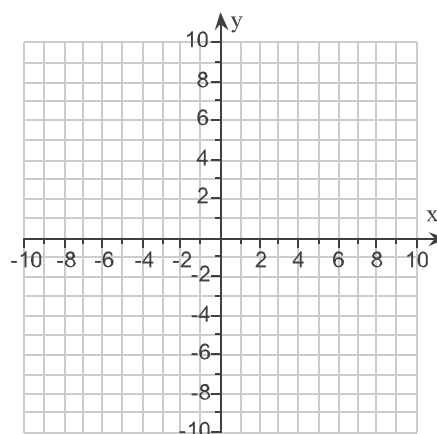
The graph for (c) $y = -x - 2$ is ☐.

The graph for (d) $y = x + 2$ is ☐.

A.   B.

C.   D.
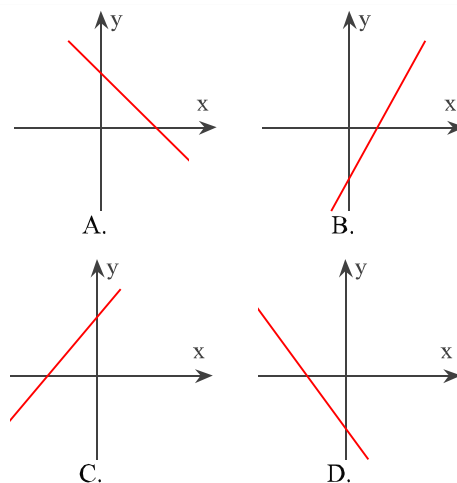
84. Use the slope-intercept form to graph the equation $-3x + y = -5$.

Use the graphing tool to graph the line. Use the slope and y-intercept when drawing the line.
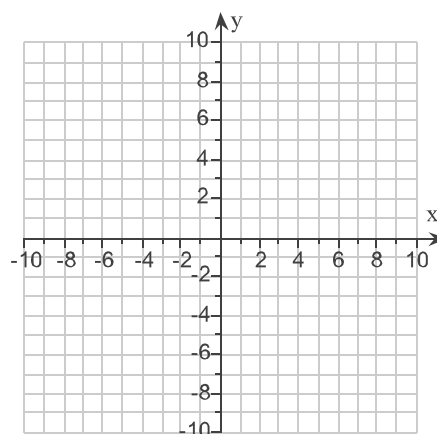
Click to enlarge graph

85. Graph the line passing through the given point and having the given slope. Give the slope-intercept form of the equation of the line if possible.

$(3, -1)$, $m = -\dfrac{3}{2}$

Use the graphing tool to graph the line. Use the given point and slope when drawing the line.

Click to enlarge graph

The slope-intercept form of the equation of the line is ☐.

(Simplify your answer. Use integers or fractions for any numbers in the equation.)
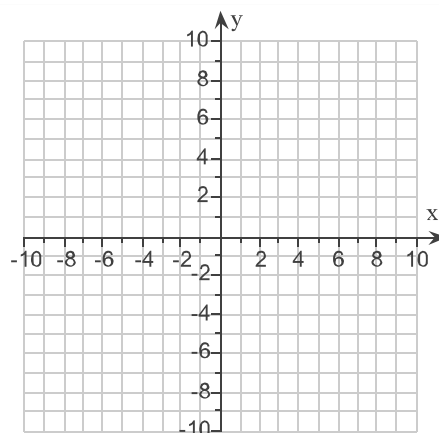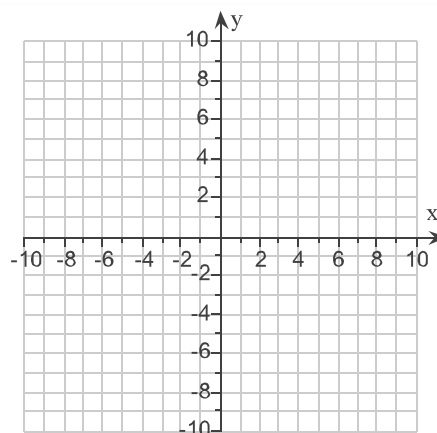
86. Find an equation of the line having the given slope and containing the given point. Then graph the line passing through the given point and having the given slope.

$m = 0$, $(0, -7)$

The equation of the line is $y =$ ☐.

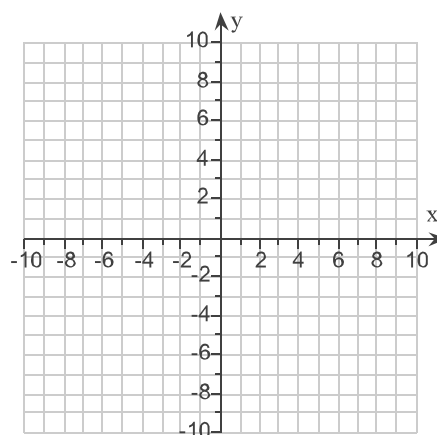Use the graphing tool on the right to graph the line. Use the given point and slope when drawing the line.

Click to enlarge graph
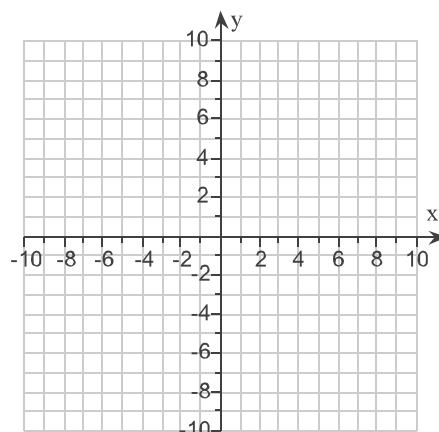
87. Graph a line passing through the point (3,1), and having an undefined slope. Give the slope-intercept form of the equation of the line if possible.

Use the graphing tool to graph the line. Use the given point and slope when drawing the line.

Click to enlarge graph

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

- A. The slope-intercept form of the equation is ▢ .
  (Use integers or fractions for any numbers in the expression.)
- B. There is no slope-intercept form.
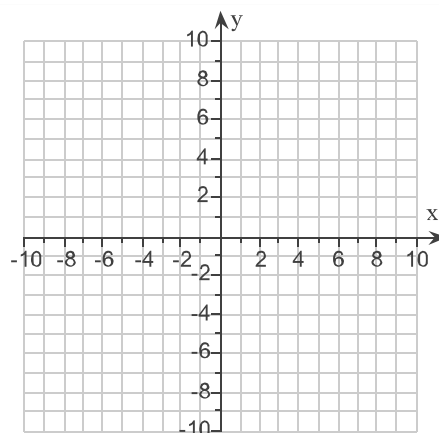
88. Graph the line with the given point and slope.

The line through (0,0) with slope $\dfrac{3}{5}$

Use the graphing tool on the right to graph the line. Use the given point and slope when drawing the line.

Click to enlarge graph
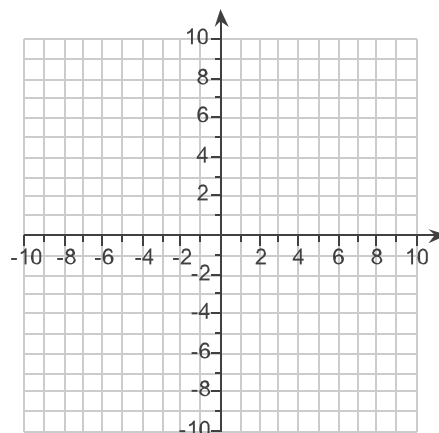
89.   Match each equation with the graph that would most closely resemble its graph.

(a) $y = x - 7$
(b) $y = -x - 7$
(c) $y = x + 7$
(d) $y = -x + 7$

The graph for (a) $y = x - 7$ is ☐.

The graph for (b) $y = -x - 7$ is ☐.

The graph for (c) $y = x + 7$ is ☐.

The graph for (d) $y = -x + 7$ is ☐.

A.

B.

C.

D.
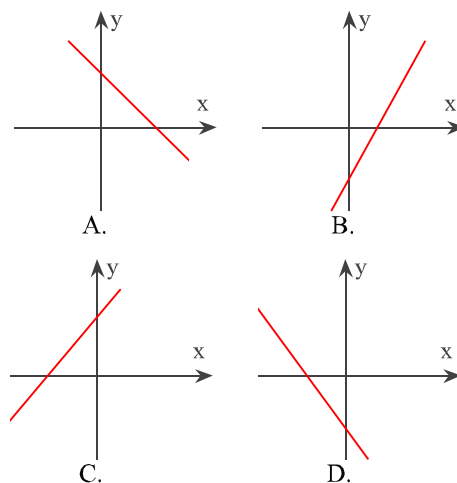
90.   Graph the equation by identifying the slope and y-intercept, and using their definitions to find two points on the line.

$$y = 2x + 4$$

Use the graphing tool to graph the line. Use the slope and y-intercept when drawing the line.

Click to enlarge graph

91. Use the slope-intercept form to graph the equation $5x + y = 4$.

Use the graphing tool to graph the line. Use the slope and y-intercept when drawing the line.

Click to enlarge graph
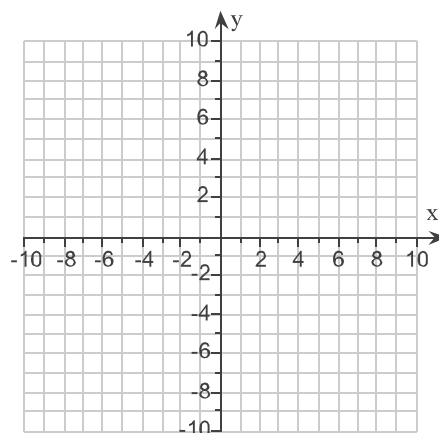
92. Graph the equation by identifying the slope and y-intercept, and using their definitions to find two points on the line.

$x + 7y = 14$

Use the graphing tool to graph the line. Use the slope and y-intercept when drawing the line.
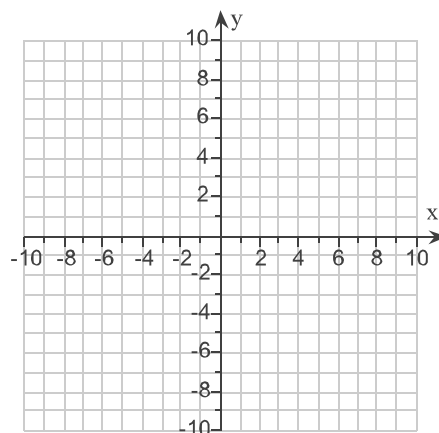
Click to enlarge graph

93.

Find an equation of the line having the given slope and containing the given point. Then graph the line passing through the given point and having the given slope.

$m = 0,\ (0, -3)$

The equation of the line is $y = \boxed{}$.

Use the graphing tool on the right to graph the line. Use the given point and slope when drawing the line.

Click to enlarge graph

94.

Graph a line passing through the point $(-1, -3)$, and having an undefined slope. Give the slope-intercept form of the equation of the line if possible.

Use the graphing tool to graph the line. Use the given point and slope when drawing the line.

Click to enlarge graph

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

○A. The slope-intercept form of the equation is $\boxed{}$.
(Use integers or fractions for any numbers in the expression.)

○B. There is no slope-intercept form.

95. Graph the line with the given point and slope.

The line through (0,0) with slope $\dfrac{3}{4}$

Use the graphing tool on the right to graph the line. Use the given point and slope when drawing the line.

Click to enlarge graph
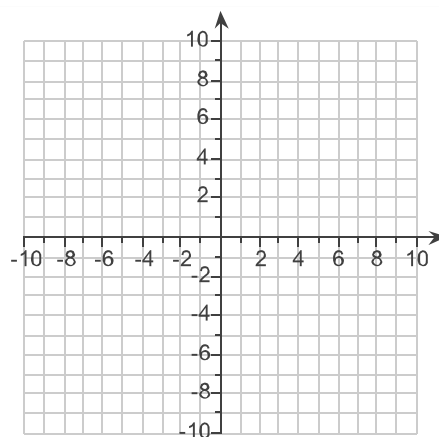
96.   Give the inequality symbol for the bold faced words.

A certain disease has killed **at least** 16 million people worldwide and infected **at least** 42 million.

Give the correct inequality symbol for the first bold faced words. Choose the correct answer below.

○A. ≥

○B. >

○C. ≤

○D. <

Give the correct inequality symbol for the second bold faced words. Choose the correct answer below.

○A. ≥

○B. >

○C. ≤

○D. <

97.   Give the inequality symbol for the bold faced words.

As of December 2007, airline passengers were allowed one carry-on bag, with dimensions totaling **at most** 49 in.

Choose the correct inequality symbol for the bold faced words.

○A. >

○B. ≥

○C. ≤

○D. <

98.   Decide whether the statement is true or false. If false, explain why.

The point (6,0) lies on the graph of $5x - 2y < 30$.

Choose the correct answer below.

○   true

○   false; The point (6,0) lies on the boundary line $5x - 2y = 30$, which is not part of the graph because the symbol $<$ does not involve equality.

1. Positiv
    Positiv

2. 135
    156

3. (4,0)
    E

4. 8

5. Nc

6. Nc

7. -5

8. 10

9. -5

10. 1

11. -5

12. -3
    $(4,-3)$
    -3
    $(2,-3)$
    -3
    $(0,-3)$

13. -5
    4
    -10
    $\dfrac{4}{5}$
    D

14. -6
    $(0, -6)$
    -6
    $(1, -6)$
    -6
    $(-7, -6)$

15. 2
    3
    -2

16. 6
    6
    6

17. 8
    8
    8

18. -5
    $(4, -5)$
    -5
    $(2, -5)$
    -5
    $(0, -5)$

19. -4
    $(0, -4)$
    -4
    $(3, -4)$
    -4
    $(-9, -4)$

20. $\left(0.6, -2\right)$

21. $\left(4, 0\right)$

22. $\left(-5, 5\right)$

23. $\left(0, -6\right)$

24. $\left(1, 0\right)$

25. $(1999, 15), (2000, 16), (2001, 9), (2002, 14)$

26. 100
94
88
82
$(25, 100), (35, 94), (45, 88), (55, 82)$
A

27. $(3, 32)$
$(16, 84)$

28. 107
102
97
92
$(20, 107), (30, 102), (40, 97), (50, 92)$
A

29. 129
166
116
149

30.

31.

32.
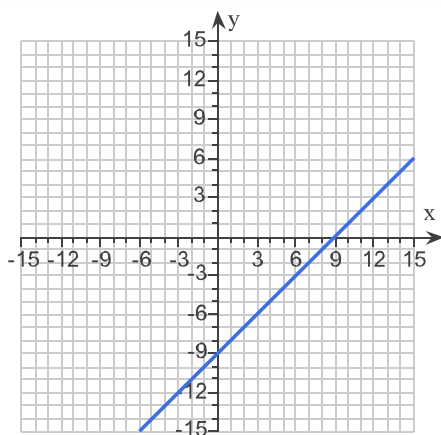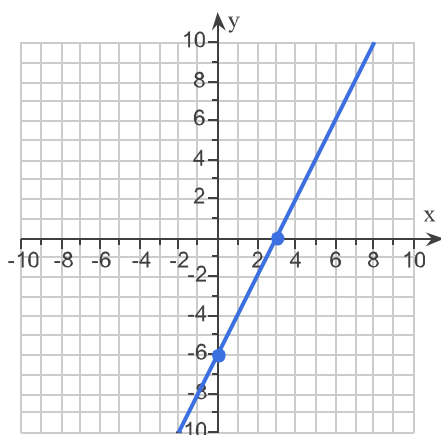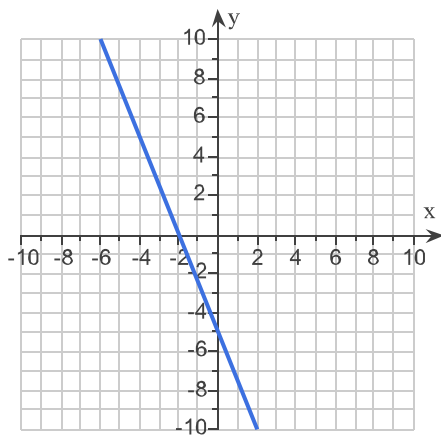
33.
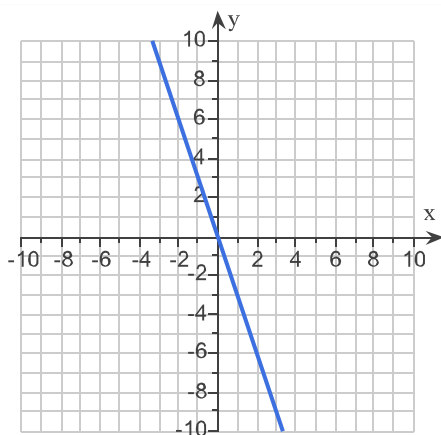
34.   B
        A
        D
        C

35. -2
        -3
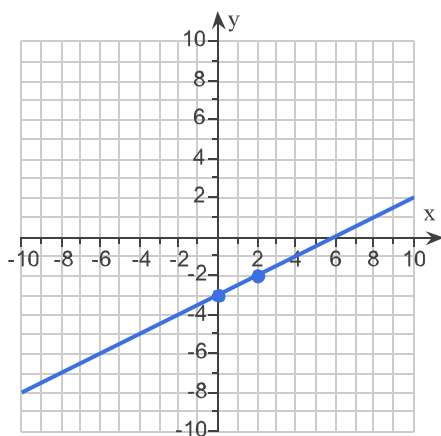
Student: _____
Date: _____
Time: _____

Instructor: Nader Green
Course: Algebra Spring 2016
(Mon-Wed)
Book: Lial: Introductory Algebra, 10e

Assignment: Ch4. Graphs of Linear Equations

36. 0
     0
     17
     (0,17)
     0
     0
     -17
     $(-17,0)$

37. D

38. B

39. A
     D
     B
     C

40. (6,0)
     $(0,-6)$

41. $(-3,0)$
     $(0,-3)$

42. -2
     0
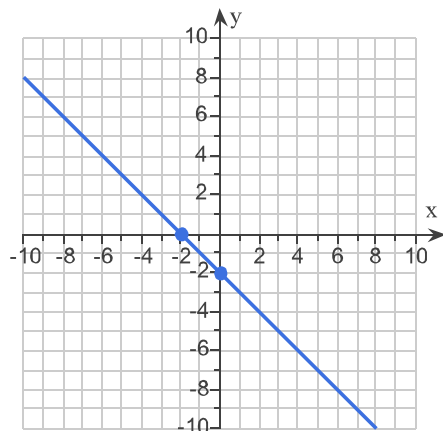
43. -5
     -6
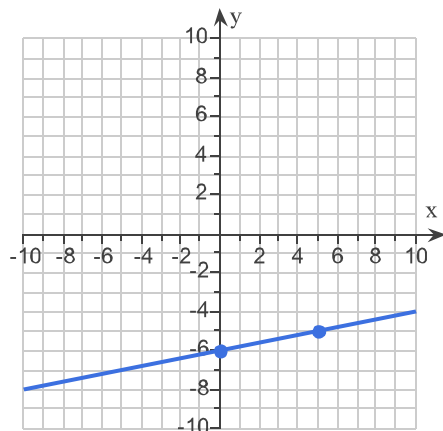
44. 8
     2
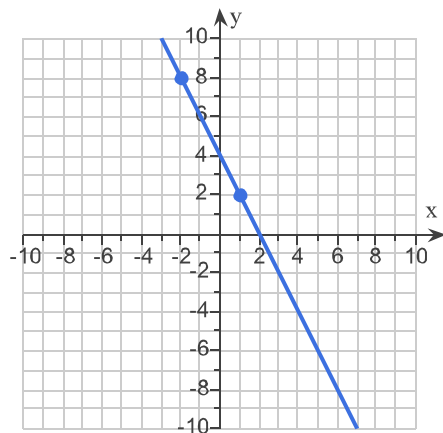
45. A, (6,0)
     A, $(0, -6)$

46. 0
     0
     -19
     $(0, -19)$
     0
     0
     19
     (19,0)

47.   (6,0)

           $(0, -7)$

48.   (0,0)

           (0,0)

49.   E
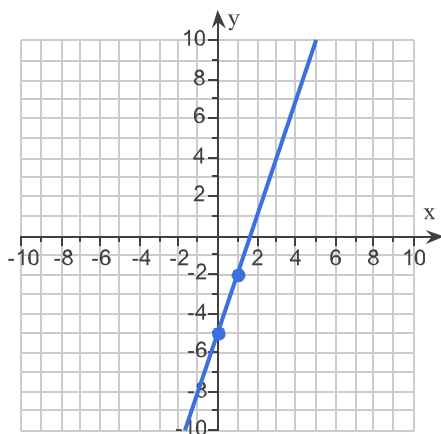
50.
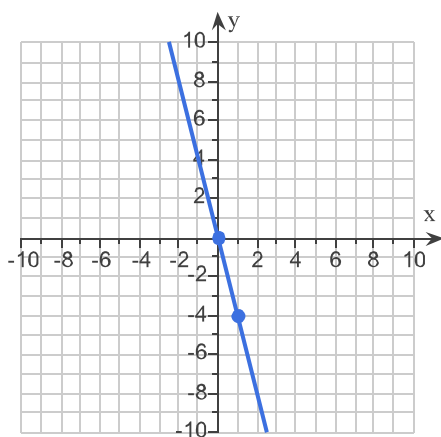
51.
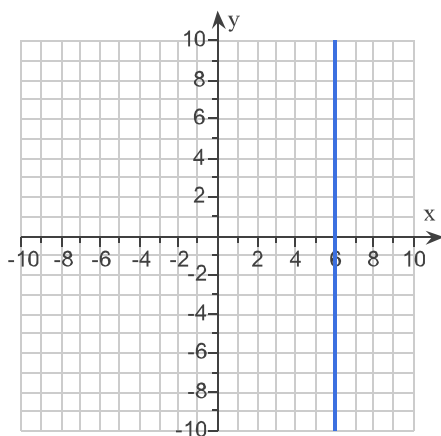
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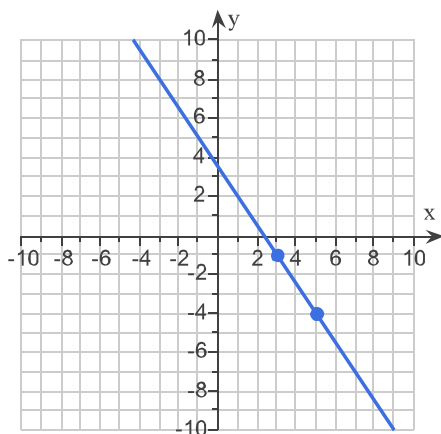Assignment: Ch4. Graphs of Linear
Equations

52.
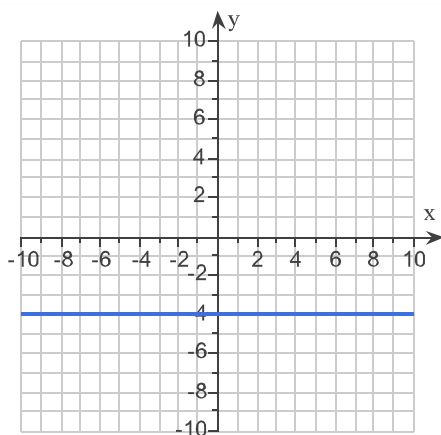
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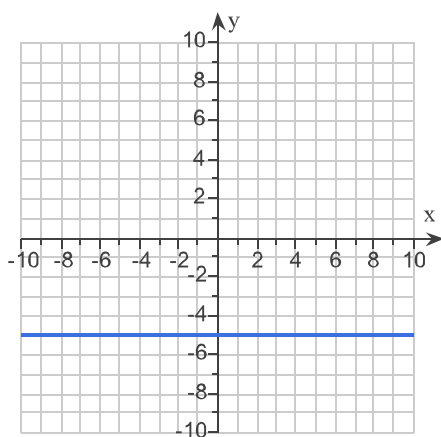
54.   B

55.   34.72
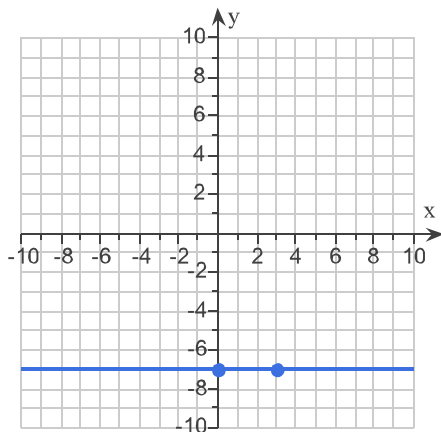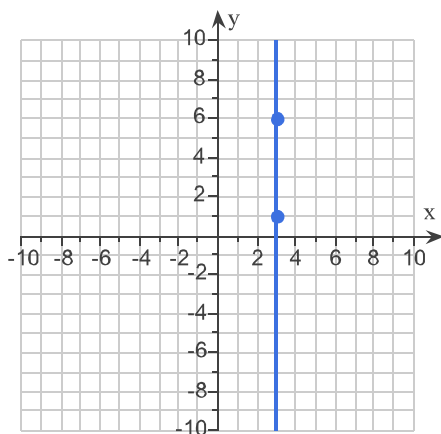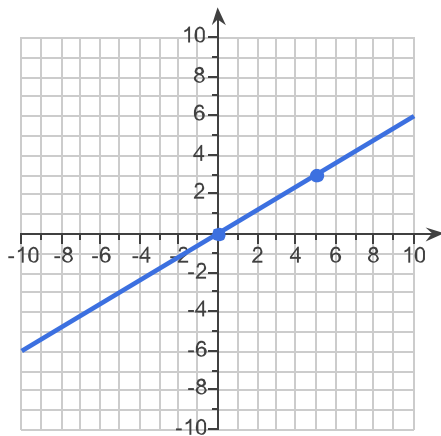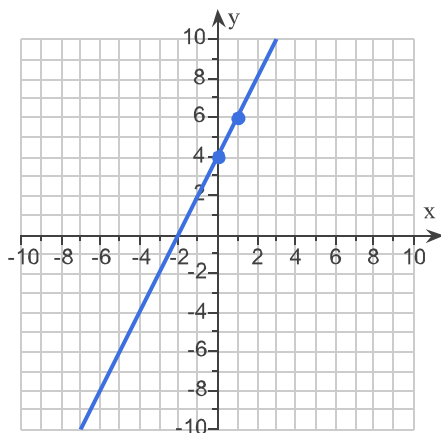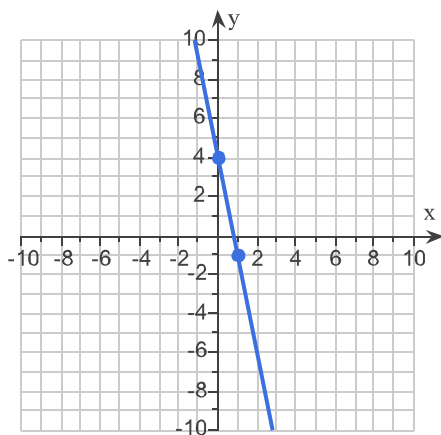51.46
54.25
C
64

56.   A, $\dfrac{5}{4}$

57.   A, 0

58.   14
      4
      $\dfrac{7}{2}$
      C
      A, -14, -4, $\dfrac{7}{2}$

59.   A, $\dfrac{6}{7}$

60.   A, $\dfrac{1}{4}$

61.   A, -3

62.   A, 0

63.   B

64.   A, $-\dfrac{17}{4}$

65.   A, -10

66.   B
      C

67.   C
      C

68.   B
      A

69.   A
      B

70. A, -9

71. A, -4

72. A, $\dfrac{1}{5}$

73. A, 0

74. B

75. A, 3

76. $-\dfrac{2}{5}$

$\dfrac{5}{2}$

C

77. $\dfrac{3}{4}$

78. $-\dfrac{5}{7}$

79. $\dfrac{5}{8}$

80. $-\dfrac{3}{4}$

81. $\dfrac{8}{3}$

$(0, -2)$

82. $y = 7x - 3$

83.   B
       A
       D
       C

84.

85.

$$y = -\frac{3}{2}x + \frac{7}{2}$$

86. -7

87.

B

88.

89.   B
            D
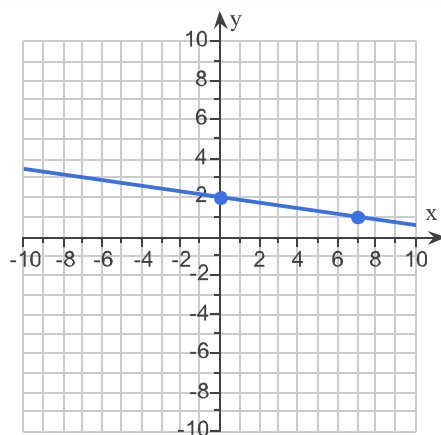   C
            A

90.

91.

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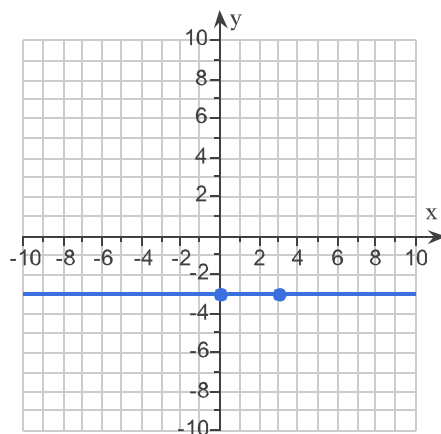(Mon-Wed)
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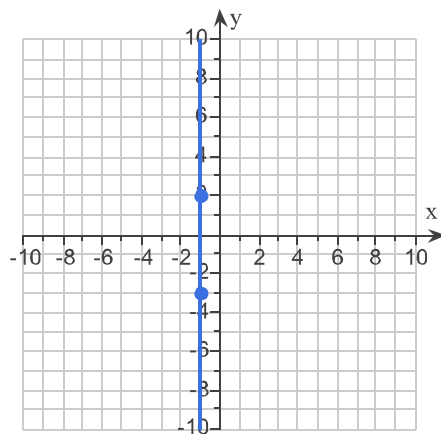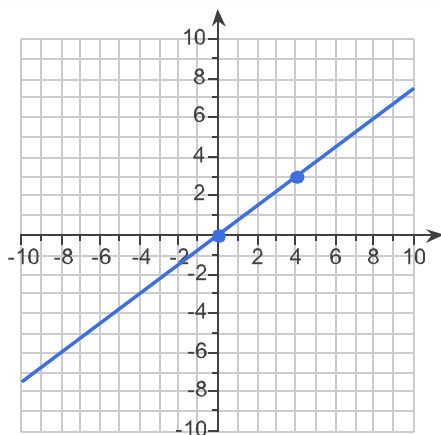
Assignment: Ch4. Graphs of Linear
Equations

92.

93.　　-3

94.

B

95.

96.   A
           A

97.   C

98.   false; The p(6,0) lies on the bound5x−2y=30, which is not part of the graph
           symbol< does not involve eq